Job Loss Analysis

Control No: 2000153_____ **Status:** Closed_____ **Original Date:** 01 July 2010

Last Date Closed: _____

Organization: Global Manufacturing

JLA Type: Global Mfg Shared

Work Type: Technical Process Engineering

Work Activity: Crude Test Run

Personal Protective Equipment (PPE)

☐ Goggles	☐ Hearing Protection	☐ Warning Device	☐ Gloves (nitrile, rubber, leather)
☐ Face Shields	☐ Hard Hat	☐ Tagout/Lockout kit	☐ Other Barrier tape
☐ Safety Glasses	☐ Safety Shoes	☐ Hi Viz Jacket	☐ Other _____
☐ Safety Back Belt	☐ Safety Cones	☐ Welding Hood	☐ Other _____

Reviewers

Reviewer Name	Position	Date Approved
Michelle Johansen	Process Engineering Manger RI/Global PED JLA Development Team leader	11/23/10
Jacob Fritz	Lead Process Engineer ES	11/10

Development Team

Development Team Member Name	Primary Contact	Position
Rachael L. Goodwin	310.615.5961	Process Engineer, El Segundo Refinery
Garth Jolly		Senior Process Engineer- RI

Job Steps

No.	Job Steps	Potential Hazard	Critical Actions
1	Obtain the whole crude assay(s) for the test run crude and the blended assay for the expected crude slate during the test run.	1.Most crudes have multiple assays. Using an incorrect assay results in a faulty process analysis leading to a safety and/or environmental incident, process upset, off test product, and an uneconomic crude purchase.	1. Consult Planning and verify that the correct assays are being used for the process evaluation.
2	Review the crude assay(s) for the test run crude and the blended assay for the expected crude slate during the test run.	1.Yields and/or properties above or below the operating limit leads to a safety and/or environmental incident, process upset and off test product.	1a.Review the notes/comments on the whole crude assay(s). 1b.Compare predicted yields and properties to the historical maximum/minimum values observed for the unit and to the current unit limits. 1c.Investigate sensitivities around the expected crude slate. If hydraulics, contaminants and composition are marginally acceptable, then communicate operating guidance in the event that the actual slate is significantly different than expected crude slate.
3	Review post mortem report from other refineries if available.	1.Observed yields and properties are different than the assay and are outside of the operating limits. Failure to identify all risks leads to a safety and/or environmental incident, process upset and off test product.	1a.Search GDW, GMKM and CrudeSuite websites for previous post mortem reports. 1b.Check with Planning and Nalco for information regarding previous test runs. 1c.Compare observed yields and properties to the historical maximum/minimum values and to the current unit limits.
4	Identify and communicate any risks and/or operational changes required to process the new crude and the proposed test run crude slate.	1.Failure to identify and communicate all risks leads to a safety and/or environmental incident, process upset and off test product. 2a.Failure to identify and communicate all risks results in an uneconomic crude purchase. 2b.Failure to communicate risks in a timely manner leads to delayed Purchasing decisions and higher crude cost.	1. Complete the crude acceptance spreadsheet/procedure for your site and submit a copy and/or report to Planning detailing any potential risks or unit limits. 2. Ensure feedback is provided by the due date.

No.	Job Steps	Potential Hazard	Critical Actions
5	Ensure the MOC process is followed before proceeding with the crude test run.	1.Failure to perform a MOC violates one or multiple tenets of operation and leads to a safety and/or environmental incident, process upset and off test product.	1. Review the JLA for creating a MOC and ensure all steps are completed on time. Pay special attention to any components that could cause increased corrosion in the units. Consult with Inspection as needed.
6	Identify any non-routine samples required to monitor unit performance and/or mitigate identified risks.	1.Sampling equipment not available or inadequate. • Unit performance cannot be quantified due to insufficient data and future crude purchases are not correctly discounted. • Failure to identify non-routine samples prior to the test run results in unplanned overtime lab coverage. • Safety and/or environmental incident, process upset and off test product.	1a.Discuss non-routine sample requests with all stakeholders (e.g. OA, PE lead, Lab) to ensure that both Lab and Operations coverage is available and scheduled. 1b.Ensure that all stakeholders are aware of any hazards associated with the non-routine samples. 1c.Complete non-routine sample request form or process at your site. If samples are to be retained in the lab be sure to include a retain date for the sample in the request. 1d.Ensure that equipment necessary for safe and efficient sampling is available prior to the crude test run (e.g. availability of draggers and sampling containers).
7	Communicate the crude test run start date, duration and operating guidelines.	1.Failure to communicate operating guidelines leads to a safety and/or environmental incident, process upset and off test product.	1. Detail potential test run risks and mitigation steps in the operating guidelines and distribute to all stakeholders (e.g. PE lead, OA, Planning, Operations, Nalco).

8	Monitor unit performance during the test run. Performance indicators may include but are not limited to the following: - Feed quality shift - Product quality shift - dP increase or decrease - Yield/conversion change - Furnace/HEX fouling - Heat balance - Chemical usage - Catalyst cost impact - Unit limit	1.Failure to monitor unit performance during the test run leads to a safety and/or environmental incident, process upset and off test product. 2.Failure to monitor unit performance during the test run will increase the amount of time required to complete test run feedback.	1. Update operating guidelines during the test run as necessary and distribute to PE lead, OA, and Operations. 2. Document unit performance, operational issues, steps taken to mitigate and the financial impact.
9	Complete post mortem feedback checklist.	1.Future crude purchases not discounted correctly due to lack of or inadequate feedback. 2.Delayed feedback results in missed opportunities to obtain economic cargos. 3.Mitigation strategies are not in place for future crude runs leading to safety and/or environmental incident, process upset and off test product.	1. Detail unit performance in crude test run feedback spreadsheet for each unit. Observations should be supported by data. Compare test run performance to typical performance using trends and tables. 2. Submit feedback to the person compiling the post mortem report by the due date. 3. Document unit performance during the test run in the monthly process report.
10	Compile test run feedback from each PE into a post mortem report, if applicable.	1.Refinery wide impact not documented in one report leads to future crude purchases not being discounted accurately and/or incorrect refinery posture for future crude runs leading to safety and/or environmental incident, process upset and off test product.	1a.Complete and distribute feedback request to each PE, be sure to assign a due date. 1b.Compile PE feedback into a post mortem report and distribute draft version to each PE for review, be sure to assign a due date. 1c.Save a copy of the final post mortem report on GDW. E-mail a link to the post-mortem report on GDW to all stake holders (e.g. PE, Planning, Operations, BIN leaders) 1d.Save a copy of the post mortem report to the online CSi program (CrudeSuite Intranet).